

# New Hampshire Rigorous Programs of Study



## Guidebook

*Based on the Development of the  
NH Accounting and Health Science Technologies Rigorous Plans of  
Study*



Logos Courtesy of [www.careerclusters.org](http://www.careerclusters.org)

# **New Hampshire Rigorous Programs of Study Guidebook**

*Based on the NH Accounting and Health Science Technologies Project*

## **INTRODUCTION:**

New Hampshire was awarded a federal grant from the Office of Vocational and Adult Education, US Department of Education to develop and implement Rigorous Programs of Study (2008-2010) that include statewide articulation agreements. In collaboration with the Community College System, Rivier College and Southern New Hampshire College, the New Hampshire Department of Education developed the Accounting and Health Science Rigorous Programs of Study which include Dual Enrollment options for students. This manual details a recommended process for the development and design of statewide Rigorous Programs of Study.

Secondary education in New Hampshire is funded by local community property taxes and governed by local community school boards. In postsecondary education, all colleges operate independently based on individual community and educational needs. The challenge of developing a statewide Rigorous Program of Study agreement is the establishment of communication and alignment between secondary and secondary, secondary and postsecondary, and postsecondary and postsecondary in a state where every entity is independent. In spite of this challenge, a great deal has been accomplished to align curriculum and develop dual enrollment opportunities for students.

Additionally, New Hampshire has developed Career Pathway Plans of Study (CPPOS). This work was merged with the National College & Careers Transitions Initiative Plan of Study. The development of CPPOSs providing a seamless educational pathway with dual enrollment opportunities from high school to the community college to four year institutions is on-going. The success of transcribed college credit taught at the secondary level is evident in the fact that New Hampshire now has over 300 courses identified as dual enrollment across ten colleges. NH will continue to identify new dual enrollment opportunities and their transferability.

This guidebook is intended to provide a step-by-step process for developing Rigorous Programs of Study utilizing the NH Career Pathway Plan of Study Model.

*The work reported herein was supported under the Rigorous Programs of Study Initiative (V051C080016) as administered by the Office of Vocational and Adult Education, U.S. Department of Education. However, the contents do not necessarily represent the positions or policies of the Office of Vocational and Adult Education or the U.S. Department of Education, and you should not assume endorsement by the Federal Government.*

## **RIGOROUS PROGRAM OF STUDY DEVELOPMENT PROCESS:**

Establish a core advisory group who will support and guide the development of the Rigorous Program of Study process for the identification and implementation in a career area. Major stakeholders may include representatives from secondary and postsecondary education, work force development agencies, and the business and industry community.

### Choose a Program

Assess the following:

- Curriculum alignment
- National and/or State Competency Standards
- Accessible college partners
- Established relationships
- Potential for Dual Enrollment
- Workforce Development Information

### SWOT Analysis

After a program is chosen, assess the following:

- Strengths
- Weaknesses
- Opportunities
- Threats

### Build partnerships in a specific career pathway

Develop:

- A core team of key representatives from secondary, postsecondary institutions and industry
- Collaboration between:
  - Secondary and Postsecondary
  - Two-year institutions
  - Two and four-year institutions

### Plan

Introductory meeting of all stakeholders to :

- Establish parameters for the project
- Review SWOT Analysis
- Develop Action Plan
  - Goal
  - Objectives
  - Timeline
- Create communication system, such as:
  - Blackboard Site
  - List Serve
  - Facebook

Develop Program Competencies (what a student completing a program should know and be able to do)

- Research National Career Clusters Knowledge and Skills
- Research Industry Standards

- Develop State Standards based on an Analysis of National and Industry Standards
- Determine core competencies appropriate for your state
- Conduct a statewide review by representatives from:
  - Industry
  - Postsecondary
  - Secondary
  - Other significant stakeholders I.e.: licensing board
- Align competencies with state core academic standards – identify the core academic standards that exist within the program competencies I.e. : English, Math, Science
- Analyze input from stakeholders
- Create draft document
- Follow your state's approval process
- Disseminate final document (See Attachment 1)

Develop Knowledge, Content and Skills (what students need to know and be able to do and upon which they will be assessed) This process may be done concurrently with competency development.

- Determine which Knowledge, Content and Skill(s) best addresses each competency
- Utilize same process as in developing competencies
- Incorporate the Carl D. Perkin's All Aspects of Industry into the appropriate knowledge, content and skill area for which the students will be assessed

#### Develop Rigorous Technical Curriculum

- Align existing curriculum to new competencies, or
- Develop a new curriculum (if one does not already exist) to represent the new competencies

#### Determine postsecondary options

- Conduct a gap analysis of secondary and postsecondary competencies.
- Determine which of the following apply:
  - Aligned curriculum
    - Fill in gaps at the secondary level creating a seamless transition from the secondary to postsecondary program
    - Ensure no remediation will be required
    - Develop Memorandum of Understanding (MOU)
  - Articulated credit
    - Ensure student performance aligns with postsecondary expectations for a given course(s)
    - Create a memorandum of understanding that clearly outlines the criteria necessary for the student to receive the college credit. (See Attachment #2)
  - Dual enrollment (See Attachment 3, 4 and 5)
    - Determine teacher credentials
    - Utilize or design postsecondary course syllabus
    - Determine Textbooks and Resources (ie: software and equipment)
    - Develop or choose third-party end-of-program assessment
    - Establish course credit fees

### Create the Rigorous Career Pathway Plan of Study (See Attachment 6)

- Follow national model and create state design
- See Appendix for a detailed description of the entire process

### Market

- Professional Development
  - Guidance and Career Guidance counselors
  - CTE teachers and administrators
  - College Admissions and Advising personnel
  - Secondary School administrators
- Brochures & Posters
- Career Fairs
- Job Fairs
- Teacher/Parent Events
- Website

### Accountability/Data Collection

- Track remediation rates in the Community College System of New Hampshire
- Track students participating in dual enrollment courses from secondary through postsecondary
- Use National Clearinghouse to identify continued postsecondary participation

### Anticipated Expenses

- Project Manager: Plans, develops, implements, oversees and completes the activities outlined in this manual
- Meetings: Related to activities outlined in this tool kit and require venue, refreshments, supplies, equipment and stipends for participants
- Travel: Attendance at meetings
- Stipends: Project-based work such as curriculum development and related assessments
- Marketing: Develop and disseminate marketing materials

### Project Review

#### Evaluation

- Evaluate on a quarterly basis
  - Progress of the development of the career pathway
  - Progress of dual enrollment opportunities
  - Use of assessment instruments
  - Monitor expenses
- Framework for Future Work
  - Reconnect project participants as staff and program changes occur
  - Update agreements and program of study as needed
  - Evaluate process and document future modifications